Claims

What is claimed is:

1. In a computer system having an operating system platform, a user interface framework system for rendering data according to a visual style defined for the data type, the system comprising:

a plurality of objects, wherein the objects have one or more data fields;

a style definition module for holding one or more visual style definitions to be selectively applied to the one or objects;

a style lookup module for locating an associated visual style definition;

a binding module for binding one or more of the plurality of data fields to one of the properties of the appropriate visual style definition;

a tree assembler module for generating a visual representation of the data based on the style definition; and

a rendering engine for displaying the data using the bound style definition.

2. A system as defined in claim 1 further comprising a layout engine for providing additional user interface elements; and

a user interface element factory for adding additional user interface elements to the data.

3. A system as defined in claim 1 wherein the objects are independent from the visual styles.

4. A system as defined in claim 1 wherein the tree assembler module builds a visual tree to represent the visual elements of the display.

5. A system as defined in claim 1 wherein the plurality of objects are displayed as a list.

6. A system as defined in claim 1 wherein the plurality of objects are displayed as a menu.

7. A system as defined in claim 1 wherein the plurality of objects are displayed as a combo box.

8. A system as defined in claim 1 wherein the objects form a group, and wherein the system further comprises a group visual style definition and wherein the tree assembler module generates the visual representation based on the group visual style, the group visual style being independently defined from the data items.

9. A method of displaying data according to an appropriate style comprising:
receiving a request to display one or more data items;
locating the appropriate visual style, wherein the style is independently defined from the data items;
generating a visual tree using the data items and the appropriate style;
binding properties in the visual tree to properties of the data items; and
rendering the display based on the visual tree.

10. A method as defined in claim 9 further comprising declaring the data items using data objects.

11. A method as defined in claim 9 further comprising:
automatically updating the visual tree in response to a change to a relevant data item.

12. A method as defined in claim 11 wherein the change to a relevant data item involves the addition of a relevant data item.

13. A method as defined in claim 11 wherein the change to a relevant data item involves the deletion of a relevant data item.

14. A method as defined in claim 9 further comprising:

    invalidating the visual tree;

    recognizing the invalidation of the visual tree; and

    in response to recognizing the invalidation of the visual tree, regenerating the necessary portions of the visual tree; and

    re-rendering the display based on the regenerated visual tree.

15. A method as defined in claim 9 wherein the data items form a list.

16. A method as defined in claim 9 wherein the data items form a menu.

17. A method as defined in claim 9 wherein the data items form a combination box.

18. A method as defined in claim 9 further comprising:

    defining a visual style for a group;

    associating the data items with the group;

    in response to the request to display the data items, locating the visual style for the group; and

    generating the visual tree based on the visual style for the group.